# **LMA District Cover Sheet**

**Spring 2017 Levee Inspection Results** 

# **Reclamation District No. 0787 Fair**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)				
	** Non-receipt of Summ Reports may effect o			
FALL INSPECTIONS: The overall maintena	d using the same crite ance rating shown abo	ria in the spring and i	n the fall.	ficiencies identified
Comments				

# **Unit Cover Sheet**

**Spring 2017 Levee Inspection Results** 

# **Reclamation District No. 0787 Fair**

Waterway	Bank	Unit Miles
Unit No. 01 Colusa Basin Drain	Left	4.45

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	5/4/2017 - 5/4/2017			
DWR Inspector	Zach Jojola			
Accompanied By	Roger Cornwell Rivergarden Farms RD 787			

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

# http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Spring 2017

# **Reclamation District No. 0787 Fair**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	05/04/2017 05/04/2017	Zach Jojola

LM Start		Rating **	Α	Issue No.		7	
LM End		Issue Type +	Ма	Location *	N/A		
Earthen Levee				GPS La	atituc	le/Longitude	
Category				Start		End	
Item		Emergency Supplies & Equipment			0		0
item	Equipmer				0		0
DWR ID	DWR_RD0	787_01_s _ 201	3_7				
		Comn	nent Cod	le			
			_				
		Inspecto	or Comm	nent			
RD 787 shares flood resources with RD 108 with a stockpile of flood response materials.							

No Photos

LM Start		Rating **	Α	Issue No.		8		
LM End		Issue Type +	Ma	Location *	N/A			
Category Earthen Levee				GPS La	atitud	e/Longitude		
Category				Start		End		
Item		Operations & Maintenance			0		0	
пеш	Manuals				0		0	
DWR ID	DWR_RD0	787_01_s _ 201	3_8					
		Comn	nent Cod	le				
Inspector Comment								
RD 787 is	current wit	h O&M manu	als.					

No Photos

LM Start		Rating **	М	Issue No.		10	_	
LM End		Issue Type +	Ма	Location *		N/A		
Category	Earthen L	evee		GPS Latitude/Longitude				
Calegory				Start		End		
Item	Flood Pre	od Preparedness & Training			0		0	
пеш			0			0		
DWR ID	DWR_RD0	787_01_s _ 201	2_10					
		Comn	nent Cod	le				
	Inspector Comment							
RD 787 wo	orks jointly	with RD 108	on trainir	ng and flood	d res	sponse.		

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Spring 2017

# **Reclamation District No. 0787 Fair**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	05/04/2017 05/04/2017	Zach Jojola

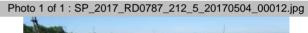
LM Start	0.01	Rating **	М	Issue No.		4
LM End	1.59	Issue Type +	Ma	Location *		WS
Category	Earthen Levee			GPS La	atitud	e/Longitude
Category				Start		End
Item	Vegetatio	n		38.7995	38 °	38.801832°
пеш				-121.7255	73 °	-121.750363 °
DWR ID	DWR_RD0	787_01_s _ 201	7_4			
		Comn	nent Cod	le		
V1 : Contro	ol annual g	rass and wee	ds on th	e levee slop	oes a	and
easements	S					
		Inspecto	or Comm	nent		

No Photos

LM Start	0.01	Rating **	U	Issue No.		5		
LM End	4.42	Issue Type +	Ma	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Item	Vegetatio	n		38.7995	38°	38.822494 °		
пеш				-121.7255	73 °	-121.795599 °		
DWR ID DWR_RD0787_01_s _ 2017_5								
	Comment Code							

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment





Tall grass on landside levee slope, blocking visibility. Spring 2017.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

# Levee Inspection Report By Mile - Spring 2017

# Reclamation District No. 0787 Fair

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	05/04/2017 05/04/2017	Zach Jojola

LM Start	0.04	Rating **	М	Issue No.		21
LM End	0.04	Issue Type +	En	Location *		LS
Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP Field Study		38.79915	9°	38.799159 °
пеш				-121.72587	4 °	-121.725874 °
DWR ID						·

#### Comment Code

# Inspector Comment

FS\_ID:37585 DS\_ID:22892 EP\_NO: 9392

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure.

FIELD\_STRUCT\_DESC: 36-inch concrete pipe through the levee 17.0 feet below the crown. Slide gate in 36-inch standpipe on the waterward side (App. 9392 - River Garden Farms). 24-inch pipe from standpipe to pump house mounted on steel structure in channel. Pump and 24-inch steel pipe installed on the waterward side, 1962 (App. 3878 - river Garden Farms).

FS Date: 6/10/2014

LM Start	0.04	Rating **	М	Issue No.	21 (cont)
LM End	0.04	Issue Type +	En	Location *	LS

#### Photo 1 of 3: UCIP\_SP\_2017\_37585\_68154.jpg



View of landward slope.

# Photo 2 of 3: UCIP\_SP\_2017\_37585\_68153.jpg



View of landward side.

# Levee Inspection Report By Mile - Spring 2017

# Reclamation District No. 0787 Fair

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	05/04/2017 05/04/2017	Zach Jojola

LM Start	0.04	Rating **	М	Issue No.		21 (cont)	
LM End	0.04	Issue Type +	En	Location *		LS	
Supplemental			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UC	P Field Study		38.79915	9°	38.799159	
пеш				-121.72587	4 °	-121.725874	
DWR ID							

#### Comment Code

### Inspector Comment

FS\_ID:37585 DS\_ID:22892 EP\_NO: 9392

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection

of structure.

FIELD\_STRUCT\_DESC: 36-inch concrete pipe through the levee 17.0 feet below the crown. Slide gate in 36-inch standpipe on the waterward side (App. 9392 - River Garden Farms). 24-inch pipe from standpipe to pump house mounted on steel structure in channel. Pump and 24-inch steel pipe installed on the waterward side, 1962 (App. 3878 - river Garden Farms)

FS Date: 6/10/2014



Photo 3 of 3: UCIP\_SP\_2017\_37585\_68156.jpg

View of waterward side.

LM Start	0.39	Rating **	М	Issue No.		1		
LM End	0.50	Issue Type +	Ma	Location *	WS			
Category	Category				GPS Latitude/Longitude			
Category				Start	End			
Item	2015 USACE Erosion Survey,			38.7959	31 °	38.795268	0	
item	DRAFT			-121.7306	27°	-121.732566	0	
DWR ID DWR_RD0787_01_s _ 2016_1								
Comment Code								

# Inspector Comment

2011 - Large scallops throughout the entire reach. Toe scour due to tree pop-outs, resulting in a steepening slope. The reduced resistive forces plus clay levee may increase the loading. Additional erosion due to human use. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: CBD\_0-5\_L]

# Levee Inspection Report By Mile - Spring 2017

# Reclamation District No. 0787 Fair

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	05/04/2017 05/04/2017	Zach Jojola

		5 // **					
LM Start	0.48	Rating **	М	Issue No.		6	
LM End	0.48	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS La	atitud	le/Longitude	
Category				Start		End	
Itom	ltem Encroachments			38.7954	09°	38.795409°	
item				-121.7320	92 °	-121.732092 °	
DWR ID	DWR_RD0	787_01_s _ 201	7_6				
		Comn	nent Cod	le			
DE : Debri	S						
		Inspecto	or Comm	nent			

No Photos

Rating \*\* Issue No. LM Start 0.67 2 0.85 Issue Type + Ma Location \* WS LM End Supplemental GPS Latitude/Longitude Category End 2015 USACE Erosion Survey, 38.795486° 38.796225° Item DRAFT -121.735647° -121.738902 ° DWR ID DWR\_RD0787\_01\_s \_ 2016\_2

Comment Code

# Inspector Comment

2011 - Large scallops throughout the entire reach. Toe scour due to tree pop-outs, resulting in a steepening slope. The reduced resistive forces plus clay levee may increase the loading. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: CBD\_0-9\_L]

No Photos

LM Start	0.73	Rating **	М	Issue No.		9	
LM End	0.73	Issue Type +	Ма	Location *		WS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory			Start		End		
Item	Slope Stability			38.7958	14°	38.795814	0
iteiii				-121.7367	99°	-121.736799	0
DWR ID	DWR_RD0787_01_s _ 2017_9						

S1 : Repair slope instability.

#### Inspector Comment

Comment Code

Multipel cracks visibile on a 50' section of the waterside slope.

# Photo 1 of 1 : SP\_2017\_RD0787\_212\_9\_20170504\_00013.jpg



View of slope stability location on waterside slope. Spring 2017.

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated
M: Not Inspected/Rated
M: Maintenance Deficiancy
Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain
En: Enforcement

# Levee Inspection Report By Mile - Spring 2017

# **Reclamation District No. 0787 Fair**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	05/04/2017 05/04/2017	Zach Jojola

LM Start	0.75	Rating **	A/W	Issue No.	12	
LM End	0.75	Issue Type +	Ma	Location *	WS	
Category Earthen Levee			GPS Latitude/Longitude			
			Start		End	
Item	Slope Stability			38.7958	91 °	38.795891 °
пеш				-121.7370	98 °	-121.737098 °
DWR ID DWR_RD0787_01_s _ 2017_12						
Comment Code						

S1: Repair slope instability.

#### Inspector Comment

50' crack beginning to develop on wateride slope. Recommend monitoring.

# Photo 1 of 1: SP\_2017\_RD0787\_212\_12\_20170504\_00014.jpg



View of slope stability location on waterside slope. Spring 2017.

Photo 1 of 1: SP\_2017\_RD0787\_212\_15\_20170504\_00015.jpg

LM Start	0.77	Rating **	М	Issue No.		15	
LM End	0.77	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory			Start		End		
Item	Slope Sta	bility		38.7959	96°	38.795996	0
item		-121.7374	93 °	-121.737493	0		
DWR ID	DWR RD0	787 01 s 201	7 15				

# **Comment Code**

S1: Repair slope instability.

#### Inspector Comment

50' slough section on waterside slope.

View of sloughing on waterside slope. Spring 2017.

LM Start	0.78	Rating **	М	Issue No.		16	
LM End	0.78	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Itom	Slope Stability			38.7960	42 °	38.796042°	
пеш	Item				61 °	-121.737661 °	
DWR ID DWR_RD0787_01_s _ 2017_16							
Comment Code							

S1: Repair slope instability.

#### Inspector Comment

Sloughing on waterside slope.



View of sloughing on waterside slope. Spring 2017.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2017

# **Reclamation District No. 0787 Fair**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	05/04/2017 05/04/2017	Zach Jojola

1.35	Rating **	M	Issue No.		17			
1.35	Issue Type +	Ма	Location *	WS				
Category Earthen Levee					e/Longitude			
			Start		End			
Trim / Thi		38.8003	75 °	38.800375				
			-121.7462	83 °	-121.746283			
DWR ID DWR_RD0787_01_s _ 2017_17								
	Comn	nent Coc	le					
rees to at l	east five feet	above g	round level.					
	Inspecto	or Comm	ent					
	1.35 Earthen L Trim / Thin	1.35 Issue Type +  Earthen Levee  Trim / Thin Trees  DWR_RD0787_01_s _ 201  Commrees to at least five feet	1.35 Issue Type + Ma  Earthen Levee  Trim / Thin Trees  DWR_RD0787_01_s _ 2017_17  Comment Coorees to at least five feet above growth and the coordinates are considered.	1.35 Issue Type + Ma Location *  Earthen Levee GPS La  Start  Trim / Thin Trees 38.8003  -121.7462  DWR_RD0787_01_s _ 2017_17  Comment Code	1.35   Issue Type +   Ma   Location *    Earthen Levee   GPS Latitud   Start   Trim / Thin Trees   38.800375   -121.746283    DWR_RD0787_01_s _ 2017_17   Comment Code   rees to at least five feet above ground level.			

LM Start	1.58	Rating **	М	Issue No.		13	
LM End	2.73	Issue Type +	En	Location *	LS		
Category Earthen Levee			GPS La	atitud	e/Longitude		
Category				Start		End	
Item	Encroachments				94°	38.809506°	
пеш				-121.750204 ° -121.7689			
DWR ID DWR_RD0787_01_s _ 2012_13							
		Comn	nent Cod	le			
DT : Ditch							
		Inspecto	or Comm	nent			

LM Start	1.58	Rating **	М	Issue No.	13 (cont)
LM End	2.73	Issue Type +	En	Location *	LS



Agricultural ditch runs along landside the distance of the district.

Photo 2 of 3: SP\_2017\_RD0787\_212\_13\_20170320\_00004.jpg



A view of the agricultural ditch in the fall of 2011.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2017

# **Reclamation District No. 0787 Fair**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	05/04/2017 05/04/2017	Zach Jojola

LM End	2.73		M	Issue No.		13 (cont)	
	2.73	Issue Type +	En	Location *		LS	
Category	Earthen Levee					e/Longitude	
Category				Start		End	
Item	Encroachments			38.8017	94°	38.809506°	
пеш			-121.750204°		-121.768979°		
DWR ID DWR_RD0787_01_s _ 2012_13							
		Comn	nent Cod	le			
DT : Ditch							
		Inspecto	or Comm	ent			

Photo 3 of 3 : SP\_2017\_RD0787\_212\_13\_20170320\_00005.jpg



The agricultural ditch runs along the toe of the levee. Spring 2014

LM Start	1.73	Rating **	М	Issue No.	11		
LM End	1.73	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
			Start		End		
Item	Encroachments			38.802693°		38.802693	0
item				-121.752672 °		-121.752672	0
DWR ID	DWR ID DWR_RD0787_01_f _ 2016_11						
Comment Code							

GA : Garbage

Inspector Comment



Burnt loudspeaker near levee crown on waterward side. Fall 2016.

LM Start	1.93	Rating **	М	Issue No.		18	
LM End	3.58	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory					Start		
Item	Vegetatio	Vegetation			38.803949°		0
пеш				-121.7560	47 °	-121.782124	0
DWR ID	DWR_RD0	787_01_s _ 201	7_18				
		Comn	nent Cod	le			
V1 : Contro easements		grass and wee	eds on th	e levee slo	oes	and	

Inspector Comment

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2017

# **Reclamation District No. 0787 Fair**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	05/04/2017 05/04/2017	Zach Jojola

	_							
LM Start	2.49	Rating **	М	Issue No.		19		
LM End	2.49	Issue Type +	Ma	Location *		WS		
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item	Encroach	ments	38.8073	79°	38.807379°			
пеш	item					-121.765371 °		
DWR ID DWR_RD0787_01_s _ 2017_19								
Comment Code								
DE : Debris								
Inspector Comment								

LM Start	3.13	Rating **	М	Issue No.	14			
LM End	4.40	Issue Type +	En	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Encroach	ments		38.81296	3°	38.822302 °		
item				-121.774880 °		-121.795295°		
DWR ID DWR_RD0787_01_s _ 2012_14								
Comment Code								
DT : Ditch								
Inspector Comment								

LM Start	3.13	Rating **	М	Issue No.	14 (cont)
LM End	4.40	Issue Type +	En	Location *	LS

Photo 1 of 3 : SP\_2017\_RD0787\_212\_14\_20170320\_00006.jpg



Ditch along landside toe.

Photo 2 of 3: SP\_2017\_RD0787\_212\_14\_20170320\_00007.jpg



A current view of the agricultural ditch photo taken in fall of 2011.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2017

# **Reclamation District No. 0787 Fair**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	4.45	05/04/2017 05/04/2017	Zach Jojola

LM Start	3.13	Rating **	М	Issue No.		14 (cont)	
LM End	4.40	Issue Type +	En	Location *	LS		
Category	evee		GPS Latitude/Longitude				
Calegory				Start		End	
Item	ments		38.8129	63°	38.822302 °		
пеш			-121.774880 °		-121.795295 °		
DWR ID DWR_RD0787_01_s _ 2012_14							
Comment Code							
DT : Ditch							
Inspector Comment							

Photo 3 of 3 : SP\_2017\_RD0787\_212\_14\_20170320\_00008.jpg



The agricultural ditch runs along the toe of the levee slope. Spring 2014

LM Start	3.58	Rating **	U	Issue No.		20	
LM End	4.42	Issue Type +	Ма	Location *	WS		
Earthen Levee				GPS Latitude/Longitude			
Category			Start		End		
Item	Vegetatio	n		38.8162	12°	38.822494 °	
пеш				-121.782124°		-121.795599°	
DWR ID DWR_RD0787_01_s _ 2017_20							
Comment Code							
V1 : Control annual grass and weeds on the levee slopes and easements.							
Inspector Comment							



Tall grass on waterside levee slope, blocking visibility. Spring 2017.